



### **Substitute Specification-Clean**

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#### **Field of the Invention**

[0001] The invention is related to improvements in the manufacturing of mattresses, based on the introduction of more natural latex rubber layers expanded with ventilation channels, which combined with the mattress spring structure provides a resistance and softness mixture to the user.

#### **Summary of the Invention**

[0002] The objective of improving the current structure of mattresses is the introduction of natural materials in the intermediate layers without significant contribution of polymeric derivatives or materials, which sometimes lead to allergic reactions for the user. Another objective is a mattress that with latex layers permit the dissipation of heat given the perforations thereof as a result of its expanded conformation, giving the mattress a ventilated quality.

[0003] Likewise, the new mattress permits in its structure the joining of covering padded elements with the latex or rubber layer, sewn in the case of external layers, upper and lower, the proposed model being of double face permitting it to be turned upside down to be used on both sides at the option of the user.

#### **Brief Description of the Drawings**

[0004] These and other objectives will become evident along the following description and observation of the annexed figures, wherein:

[0005] FIG. 1 is a perspective view of the mattress model;  
and

[0006] FIG. 2 is a transverse section of the width of the

mattress through line 1-1.

#### Description of the Preferred Embodiments

[0007] The mattress 10 of the invention (FIG. 1) is mono-block, prismatic, rectangular element, generally with a layer or padded cover 11 with superficial design and patterned, attached to an overlapped rubber layer and other layers that will be described in detail below for configuring the width of the body that by its lower face repeats again the padded cover 11.

[0008] FIG. 2, a diagonal cut of the mattress body 10 on its width shows in order:

[0009] a padded layer 11 of textile or formed generally of 75% cotton and 25% polyester, which is attached to

[0010] a natural rubber lamina 12 formed of latex of approximately 35 mm width overlapped to another similar layer 12

[0011] a plush of natural sisal 14 of 10 mm width, which at the same time is contacted on its lower face with

[0012] a natural cotton layer 13 of 20 mm width in 2 layers, overlapped to

[0013] another sisal plush 14 resting on

[0014] a metallic spring unit 15, with a diameter of 75 mm and height of 125 mm.

[0015] The second cover of the mattress structure is repeated spring from the lower face of the spring unit with a sisal plush layer 14, the cotton laminas 13, the sisal plush 14, the latex rubber layers 12 and the cover pad 11, providing a symmetric structure configuration to the mattress width, which permits such model to be turned upside down for its use on both sides.

[0016] For illustration of the proposed model dimensional scope, the width of the mattress can reach 40 cm  $\pm$  0-1 cm, if we consider the size of each illustrated component. Some

characteristics of the mattress structural elements are as follows:

[0017] The latex laminas or layers or natural rubber layers of its 35 mm width are produced through the Talalay system and the superficial perforations made by the mold during the latex aspiration expansion, giving rise to a superficial and passing perforation of the formed layer permitting a ventilation of the mattress, dissipating heat, contrary to synthetic foams that produce heat.

[0018] The natural sisal layers making contact with the metallic structure of the spring unit faces act as a support of the agglomerated fibers of processed cotton. This sisal undergoes a process from the sun dried fibers, which are unfolded in plates later permitting agglomeration and interweaving of fibers for producing a cover or blanket that is cut in accordance with the blanket incorporation measures.

[0019] As outstanding items in the manufacturing technology of our model we find:

[0020] padded covers on the union by sewing of the formed cover and the latex

[0021] latex and metallic spring combination providing firmness and elasticity to the mattress

[0022] the perforated latex layer for providing ventilation of the mattress and dissipating heat

[0023] the incorporation of natural products, without the use of synthetic elements with their allergic effects and others.

[0024] Therefore the scope of the invention in accordance with the described and illustrated model is defined in the following claims.